



Data Analysis for Strategic Investments

Table of Contents

| | | |
|---|-----------------------|---|
| 1 | Introduction | 3 |
| 2 | Product Backlog | 3 |
| 3 | Rules | 3 |
| 4 | Data Sets | 4 |
| 5 | Deliverables..... | 5 |

1 Introduction

Customers offer data set about countries and their growth indicators. The business team wants to analyze the data and make strategic decisions to know what kind of projects need to be invested upon in the most suitable countries. Power, energy, shipping etc. are some of the areas in which the company wants to invest in.

Analyzing this data set on countries and their growth indicators can indeed provide valuable insights for making strategic investment decisions in various sectors such as power, energy, shipping, and more.

2 Product Backlog

| # | Epic | Module | Feature |
|----|-----------------|---------------------|------------------------------|
| 1 | Induction | Project Orientation | Project Walkthrough |
| 2 | Induction | Project Orientation | Data Set Exploration |
| 3 | Induction | Project Orientation | Requirements Documentation |
| 4 | Data Management | Data Documentation | Create Data Dictionary |
| 5 | Data Management | Data Set | Clean Data Set |
| 6 | Data Management | Data Set | Generate Missing Data |
| 7 | Data Management | Data Migration | Import Data to DB |
| 8 | Data Management | Data Migration | Create Workflow |
| 9 | Data Management | Data Migration | Create Master Data & Mapping |
| 10 | Data Management | Data Migration | Apply Formula and Rules |
| 11 | Visualizations | Visualizations | View Dashboards in Excel |

3 Rules

1. Data Preparation:

- Clean the data by removing any missing or inconsistent values and ensure data uniformity and consistency.
- Identify relevant variables for analysis, such as GDP growth, infrastructure indicators, energy consumption, trade data, etc.

2. Identify Key Indicators:

- Identify key indicators related to the power, energy, and shipping sectors. These may include electricity production, renewable energy capacity, energy consumption per capita, port infrastructure, logistics performance index, etc.
- Select additional relevant indicators, such as GDP growth, population growth, to gain a comprehensive understanding of the investment environment.

3. Analysis & Insights:

- Compare the indicators across different countries to identify potential investment opportunities.
- Identify countries that show consistent positive growth in relevant sectors,
- Analyze the relationship between various indicators to identify correlations and potential causal factors.
- Perform a sector-specific analysis for power, energy, shipping, etc., to identify
- Generate visualizations like charts, graphs, and maps to present the data in an intuitive manner.

4. Risk Assessment:

- Use relevant risk assessment frameworks or indices to quantify and compare investment risks across countries.
- Down trend in population, GDP decline are couple of indicators of risk

5. Prioritization and Decision Making:

- Combine the findings from the analysis to prioritize countries based on their growth potential, sector-specific opportunities, and risk assessment.
- Consider the business team's investment goals, budget, and long-term strategies when making final investment decisions.
- Create a comprehensive report summarizing the analysis, key findings, and recommended investment strategies.

6. Data Migration

- This service is being offered to customers of the company. New data sets may be provided by each customer with the same dictionary and format though.
- We might have only population and GDP for a customer and for another population and electricity access
- We need to map the data sets given for each customer and the workflow must be defined accordingly
- Data will be share in a common drive and need to pull data. This must be scheduled to be picked up at 2am every night
- Date and time, files migrated have to be stored for each customer in the database

4 Data Sets

- Population
- Rural Population
- Electricity Access
- GDP

5 Deliverables

The below mentioned deliverables need to be submitted to the client

1. Refined – Organized Data Set
2. Data Dictionary
3. Data Set : Generated
4. Visualizations in Excel